

XLIII.—*Descriptions of some apparently new species of Homopterous Insects in the Collection of the British Museum.* By ADAM WHITE, M.E.S., Assistant in the Zoological Department of the British Museum.

APHANA (*Guérin*), *Burm.*

Aphana imperialis, White. Elytra olive-green, the basal portion with numerous black spots, most of which are traversed by green veins; the tip black, beautifully reticulated with olive-green. Wings at the base purplish madder, with eleven or twelve large black spots, the purplish part reticulated with whitish; the end brownish black; a bluish green band-like mark across the middle of the wing, not nearly reaching the hind margin, the three nerves traversing it are black. Under sides of elytra and wings almost similar to the upper side. Head and thorax above greenish. Prothorax finely transversely striated, a line down the middle shining. Abdomen black, margins yellow, segments slightly powdered with white, vulvar scales red. Legs brown; tibiae of hind legs with three teeth on the outside.

Expanse of elytra 2 inches 5 lines.

Hab. Silhet.

In marking and general appearance similar to *Aphana delicatula*, sent to the Museum from Canton by the late Tradescant Lay, Esq.; the *Aphana amabilis*, Hope (Linn. Trans. xix. 132. t. 12. f. 1), from Silhet is somewhat allied to it, but neither *A. delicatula* (Ann. and Mag. Nat. Hist. vol. xv. 37) nor the present species have the slender, sharp, erect horn which is on the head of *A. amabilis*.

Aphana scutellaris, White. Elytra with the base dark green, the tip ochrey yellow, the basal portion except on the outer margin thickly covered with a white sponge-like matter, the veins green, the tip with a good deal of white sponge-like matter, some roundish spots in the middle free from it. Wings at the base green, mixed with violet-blue; in the middle a large red mark reticulated with yellowish, inner and part of the outer margin of a pale ochrey yellow, the tip deep brownish yellow, beyond the middle of the wing a dark brownish line not quite reaching the hind margin: middle of the wing with nine or ten white spots of different sizes; several small bluish white spots on the apical part, under sides somewhat similar, the base of elytra green, marked and thickly spotted with black. Head and thorax above of a very deep blackish green, the vertex with two white patches in a depression, ridged in front and on the sides. Prothorax strongly ridged in the middle; scutellum (mesonotum) covered with white sponge-like matter. Abdomen very deep blackish green above, the segments at the base above, powdered with

white, the abdominal spiracles white. Legs deep brown; the tibiæ of hind legs with five teeth on the outside (exclusive of terminal).

Expanse of elytra from 2 inches 1 line to 2 inches 6 lines.

Hab. Borneo. H. Low, Esq.

This species in the system comes near *A. atomaria* (Fabr.).

ENCHOPHORA, *Spinola*.

Enchophora guttata, White. Elytra brownish red, tip yellowish, the basal portion with some scattered subocellated spots; interior red, nearly surrounded by a black ring; front margin yellowish green. Wings brownish black, the base and disc with several crimson spots of different sizes; under side of elytra at the base of a deeper red than above. Cephalic protuberance short, not thickened at the end, and but slightly bent back, compressed on the sides. Prothorax yellowish green, with a transverse brownish mark in front. Abdomen dull orange, the last segment having under it a white waxy secretion, composed apparently of closely compressed filaments not extending beyond the abdomen. Legs reddish brown; tibiæ of hind legs with six spines on the outside.

Expanse of elytra 2 inches 7 lines.

Hab. S. America. Presented by Edward Doubleday, Esq.

This species, somewhat allied to *Enchophora Servillei*, Spinola (Ann. Soc. Ent. Fr. viii. 227. t. 2. f. 3), seems to form a connecting link between *Enchophora* and *Aphana*.

TOSENA, *Serville and Amyot*.

Cicada (T.) melanoptera, White. In the Javanese *C. (T.) fasciata* the nerves of the elytra and the wing are of a very clear ferruginous colour; on the front of the nasus is a ferruginous yellow line sometimes interrupted, and on the fore edge of prothorax are four small ferruginous yellow spots; the tips of the femora are yellow: in the species or variety *melanoptera*, the nerves of the elytra and wings are nearly entirely black, the band on the wing is whiter and generally broader than in *C. fasciata*; the nasus is entirely black, there are no spots on the fore-edge of the prothorax, the yellow marks above the antennæ are smaller, and the legs are of a uniform black. There are several specimens in the Museum collection from Silhet and other parts of N. India; in size and general colour it resembles the *Cicada (Tosena) fasciata* of Fabricius, of which eventually it may prove to be a local variety, to which the name *melanoptera* may be applied.

GÆANA, *Serville and Amyot*.

In this subdivision of the genus a beautiful species of *Cicada* from Nepal ought to be placed; it is figured in Royle's 'Illus-

trations of the Botany, &c. of the Himalaya Mountains,' pl. 10. f. 2, under the name *Cicada pulchella*; Mr. Westwood in the Introduction, p. 54, describes it as *Cicada sulphurea*, Hope's MSS., the specific name *pulchella* being pre-occupied. In the Museum cabinet are several specimens named *Gæana pulchella*.

HUECHYS, *Serville and Amyot.*

Cicada (Huechys) vidua, White. Elytra deep uniform blackish brown. Wings white, transparent, slightly tinged with brownish round the edge. Head black, nasus of a clear gamboge-yellow, very prominent. Thorax black, two large gamboge-yellow spots on mesothorax. Body above black in male, brownish in female. Abdomen in the middle, below, and at the end vermilion-red; in the female the sides of the abdomen at the end are also red.

In one specimen in the Museum (a female) are two or three lighter streaks on the elytra not far from the posterior margin.

Expanse of wings from 1 inch $8\frac{1}{2}$ lines to 2 inches 4 lines.

Hab. New Holland?

In the division *Huechys* come *Cicada (H.) splendidula* from the East Indies, described by Fabricius (Syst. Rh. 42. 49), and figured in Donovan's 'Insects of China,' fig. * * * *, and *Cicada (H.) octonotata*, Westwood (Arc. Ent. t. 57. fig. 2), both which species are in the Museum collection.

TETTIGARCTA, *White*, in the Appendix to Eyre's Travels in Australia, i. 412 (Aug. 1845).

Head very small, in front blunt; lateral ocelli close to the eyes, the space between them furnished with long hairs. Prothorax very large, extending back in a rounded form beyond the base of the hind wings, sharp-pointed on the sides; the back convex and wrinkled. Body and under parts densely clothed with hair.

This genus differs from all the Stridulantes in the size and shape of the prothorax: in the neuration of the wing it is allied to *Platypleura* (Serville and Amyot); in the size of the head and the hairiness of the body it approaches *Carineta* (Serv. and Am.).

Tettigarcta tomentosa, White, l. c. 413. tab. 4. fig. 4. Brownish ash, hairs on the upper part of the body short, deep brown, hairs on the sides and under parts long and gray. Prothorax varied with black, in front are two large patches covered with gray hairs. Elytra spotted and varied with brown. Wings clear, somewhat ferruginous at the base.

Expanse of elytra 3 inches 4 lines.

Hab. Australia, near Melbourne.

NOTE.—*Eurybrachys lata*, White, in the Appendix to Eyre's 'Travels', where it is figured and described (pl. 4. f. 3. p. 412), is

closely allied to but distinct from the *E. abbreviatus*, Guérin, Voy. Coq. Zool. ii. 193.

CEROPLASTES, Gray.

Coccus (Ceroplastes) jamaicensis, White. Mr. Gray in the 'Spicilegia Zoologica' (p. 7. tab. 3. f. 6. and 7) has described and figured two species of a singular insect of the family *Coccidæ*, found by the late Lady Callcott during her residence in Brazil. For their reception he has formed the genus *Ceroplastes*, characterized as follows:—

"The seven plates, of which the covering of the female is composed, are arranged in two lateral pairs, and a central series consisting of an anterior, a dorsal and a posterior plate; the nucleus of the six marginal plates is close to the lower edge, that of the dorsal one nearly central." The two species described are *C. chilensis*, large, white, pellucid, the plates nearly equal in size, the dorsal flattish; it was found on the branches and peduncles of a tree with pinnated leaves: the second species, *C. janeirensis*, is smaller, brownish, subopaque, hemispherical, the dorsal plate convex; it was found on a species of *Solanum* with simple lanceolate velvety leaves.

In the 'Philosophical Transactions' for 1794, p. 383, Dr. Pearson described an insect allied to the above under the name of "White-lac," somewhat similar to the Pe-la of the Chinese. Mr. Gray, in his memoir, refers to species of similar insects as having been found by Humboldt and D'Azara. The occurrence of another distinct species of this genus, in a collection made by Mr. Gosse in Jamaica, induces me to make this note and add its description. They were taken from the trunk of a lance-wood tree. Mr. Gosse mentions that they melt in a candle like wax: in size it approaches Mr. Gray's second species, in colour and form it is different; it may be called *Ceroplastes jamaicensis*. *It is of a yellowish green colour; the base is almost hexagonal; there are six marginal plates, each of which is slightly notched in the middle below; the upper plate is notched behind and has two prominences in front.*

XLIV.—*Mode of the Formation of the Spore in a species of Vesiculifera.* By G. H. K. THWAITES, Esq.

To the Editors of the Annals of Natural History.

GENTLEMEN,

2 Kingsdown Parade, Bristol, March 24, 1846.

HAVING recently met with a species of *Vesiculifera* just in that state of maturity calculated for showing to advantage the various stages in the development of the spore, I did not let slip the op-